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KEEP

FEDERAL AVIATION AGENCY

S/NL-11-5-62

5A6
Revision 34
CESSNA
180
180A
180B
180C
180D
180E
180F

April 15, 1963

AIRCRAFT SPECIFICATION NO. 5A6

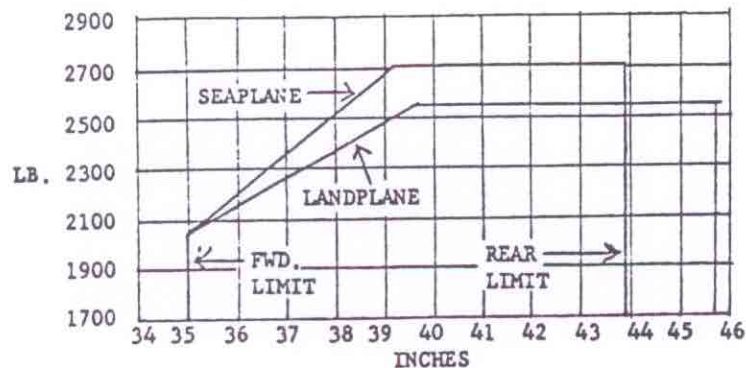
Manufacturer

Cessna Aircraft Company
Wichita, Kansas

I - Model 180, 4 PCL-SM (Normal Category), Approved December 23, 1952

Engine	Continental O-470-A (See item 106 for optional engine)
Fuel	80/87 minimum grade aviation gasoline
Engine limits	For all operations, 2600 r.p.m. (225 hp.)
Airspeed limits	Maneuvering 122 m.p.h. (106 knots) True Ind.
	Maximum structural cruising 160 m.p.h. (139 knots) True Ind.
	Never exceed 184 m.p.h. (160 knots) True Ind.
	Flaps extended 100 m.p.h. (87 knots) True Ind.
C.G. range	Landplane: (+39.5) to (+45.8) at 2550 lb.
	(+35.0) to (+45.8) at 2050 lb. or less
	Seaplane with item 209(a) (+39.3) to (+43.9) at 2700 lb.
	(+35.0) to (+43.9) at 2050 lb. or less

Straight line variation between points given.



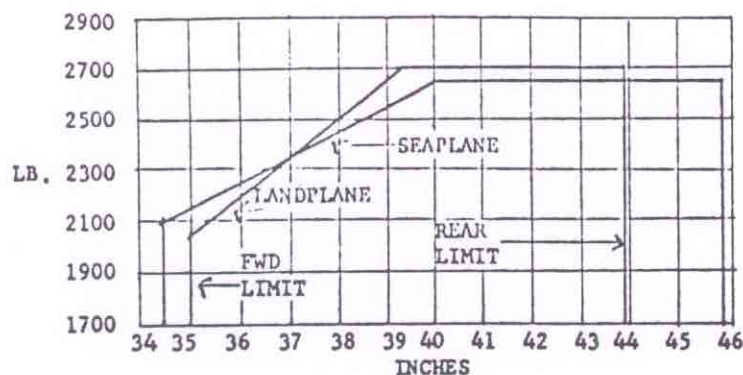
Empty wt. C.G. range	None										
Maximum weight	Landplane: 2550 lb. Seaplane: 2700 lb.										
No. of seats	4 (2 at +36, 2 at +70)										
Maximum baggage	120 lb. (+95)										
Fuel capacity	60 gal. total, 55 gal. usable (Two 30 gal. tanks in wings at +48) See NOTE 1 for weight of unusable fuel										
Oil capacity	3 gal. (-15) (Includes 9 lb. unusable)										
Control surface movements	Wing flaps <table border="0"> <tr> <td>Takeoff</td> <td>0° & 20°</td> </tr> <tr> <td>Landing</td> <td>30° & 40°</td> </tr> <tr> <td>Up 20°</td> <td>Down 15°</td> </tr> <tr> <td>Up 1° 30'</td> <td>Down 8° 30'</td> </tr> <tr> <td>Up 25°</td> <td>Down 23°</td> </tr> </table>	Takeoff	0° & 20°	Landing	30° & 40°	Up 20°	Down 15°	Up 1° 30'	Down 8° 30'	Up 25°	Down 23°
Takeoff	0° & 20°										
Landing	30° & 40°										
Up 20°	Down 15°										
Up 1° 30'	Down 8° 30'										
Up 25°	Down 23°										
Ailerons	Up 20°										
Stabilizer	Up 1° 30'										
Elevators	Up 25°										
With stabilizer full down											
Rudder	Right 24° Left 24°										

Serial Nos. eligible 604, 30000 to 32661, inclusive. Under the delegation option provisions of Part 410 of the Regulations of the Administrator, the Designated Manufacturer's Certification Representative (DMCR) is authorized to: issue airworthiness certificates for airplanes serial Nos. 30938 and up; and approve repairs and alterations of airplanes serial Nos. 604, 30000 to 32661, inclusive.

Required equipment In addition to the pertinent required basic equipment specified in CAR 3, the following items of equipment must be installed:
 Landplane: items 1, 102, 103, 201, 202, 204, 401, 406.
 Skiplane: items 1, 102, 103, 208, 401, 406.
 Seaplane: items 1, 102, 103, 209, 401, 406

II - Model 180A, 4 PCL-SM (Normal Category), Approved December 17, 1956

Engine Continental O-470-K
Fuel 80/87 minimum grade aviation gasoline
Engine limits For all operations, 2600 r.p.m. (230 hp.)
Airspeed limits Manuevering 122 m.p.h. (106 knots) True Ind.
 Maximum structural cruising 160 m.p.h. (139 knots) True Ind.
 Never exceed 184 m.p.h. (160 knots) True Ind.
 Flaps extended 100 m.p.h. (87 knots) True Ind.
C.G. range Landplane: (+40.0) to (+45.8) at 2650 lb.
 (+34.5) to (+45.8) at 2100 lb. or less
 Seaplane with item 209(a) (+39.3) to (+43.9) at 2700 lb.
 (+35.0) to (+43.9) at 2050 lb. or less
 Straight line variation between points given



Empty wt. C.G. range None
Maximum weight Landplane: 2650 lb.
 Seaplane: 2700 lb.
No. of seats 4 (2 at +36, 2 at +70)
Maximum baggage 120 lb. (+95)
Fuel capacity 65 gal. total, 55 gal. usable (Two 32-1/2 gal. tanks in wings at +48)
 See NOTE 1 for unusable fuel.
Oil capacity 3 gal. (-15) (Includes 9 lb. unusable)
Control surface movements Wing flaps: Takeoff 0° & 20°, Landing 30° & 40°
 Ailerons: Up 20°, Down 15°
 Stabilizers: Up 1° 30', Down 8° 30'
 Elevators: Up 25°, Down 23°
 With stabilizer full down: Rudder Right 24°, Left 24°

Serial Nos. eligible 32662 through 32999, 50001 through 50355. Type certificate issued and DMCR authorized to issue airworthiness certificate under delegation option provisions of Part 410 of the Regulations of the Administrator.

Required equipment In addition to the pertinent required basic equipment specified in CAR 3, the following items of equipment must be installed:
 Landplane: items 1, 102, 103, 201, 202, 204, 401
 Skiplane: items 1, 102, 103, 208, 401, 406
 Seaplane: items 1, 102, 103, 209, 401, 406

III - Model 180B, 4 PCL-SM (Normal Category), Approved August 22, 1958

Engine	Continental O-470-K	
Fuel	80/87 minimum grade aviation gasoline	
Engine limits	For all operations, 2600 r.p.m. (230 hp.)	
Airspeed limits	Maneuvering	122 m.p.h. (106 knots) True Ind.
	Maximum structural cruising	160 m.p.h. (139 knots) True Ind.
	Never exceed	184 m.p.h. (160 knots) True Ind.
	Flaps extended	100 m.p.h. (87 knots) True Ind.
C.G. range	Landplane:	(+40.0) to (+45.8) at 2650 lb.
		(+34.5) to (+45.8) at 2100 lb. or less
	Seaplane with item 209(a)	(+39.3) to (+43.9) at 2700 lb.
		(+35.0) to (+43.9) at 2050 lb. or less
	Straight line variation between points given	
	Refer to diagram under Section II	
Empty wt. C.G. range	None	
Maximum weight	Landplane:	2650 lb.
	Seaplane:	2700 lb.
No. of seats	4 (2 at +36, 2 at +70)	
Maximum baggage	120 lb. (+95)	
Fuel capacity	65 gal. total, 55 gal. usable (Two 32-1/2 gal. tanks in wings at +48)	
	See NOTE 1 for unusable fuel	
Oil capacity	3 gal. (-15) (Includes 9 lb. unusable)	
Control surface movements	Wing Flaps	Takeoff 0° & 20° Landing 30° & 40°
	Ailerons	Up 20° Down 15°
	Stabilizer	Up 1° 30' Down 8° 30'
	Elevators	Up 25° Down 23°
	With stabilizer full down	
	Rudder	Right 24° Left 24°

Serial Nos. eligible 50356 through 50661. Type certificate issued and DMCR authorized to issue airworthiness certificates under delegation option provisions of Part 410 of the Regulations of the Administrator.

Required equipment In addition to the pertinent required basic equipment specified in CAR 3, the following items of equipment must be installed:
 Landplane: items 1, 102, 103, 201, 202, 204, 401, 406.
 Skiplane: items 1, 102, 103, 208, 401, 406.
 Seaplane: items 1, 102, 103, 209, 401, 406

IV - Model 180C, 4 PCL-SM (Normal Category), Approved July 8, 1959
Model 180D, 4 PCL-SM (Normal Category), Approved June 14, 1960
Model 180E, 4 PCL-SM (Normal Category), Approved September 21, 1961
Model 180F, 4 PCL-SM (Normal Category), Approved June 25, 1962

Engine	Continental O-470-L or O-470-R
Fuel	*80/87 minimum grade aviation gasoline
Engine limits	*For all operations, 2600 r.p.m. (230 hp.)

Airspeed limits	*Maneuvering	122 m.p.h. (106 knots) True Ind.
	*Maximum structural cruising	160 m.p.h. (139 knots) True Ind.
	*Never exceed	184 m.p.h. (160 knots) True Ind.
	*Flaps extended	100 m.p.h. (87 knots) True Ind.
C.G. range	*Landplane	(+40.0) to (+45.8) at 2650 lb.
		(+34.5) to (+45.8) at 2100 lb. or less
	*Seaplane with item 209(a)	(+39.3) to (+43.9) at 2700 lb.
		(+35.0) to (+43.9) at 2050 lb. or less
Straight line variation between points given		
Refer to diagram under Section II		
Empty wt. C.G. range	None	
Maximum weight	Landplane: 2650 lb.	
	Seaplane: 2700 lb.	
No. of seats	4 (2 at +36, 2 at +70)	
Maximum baggage	120 lb. (+95)	
Fuel capacity	*65 gal. total, 55 gal. usable (Two 32-1/2 gal. tanks in wings at +48)	
	See NOTE 1 for unusable fuel	
Oil capacity	3 gal. (-15) (Includes 9 lb. unusable)	
Control surface movements	Wing flaps	Takeoff 0° & 20° Landing 30° & 40°
	Ailerons	Up 20° Down 15°
	Stabilizer	Up 1° Down 8° 45'
	Elevator with stabilizer full down	Up 25° Down 23°
	Rudder	Right 24° Left 24°
Serial Nos. eligible	Model 180C:	624, 50662 through 50911
	Model 180D:	18050912 through 18051063
	Model 180E:	18051064 through 18051183
	Model 180F:	18051184 and up
Type certificate issued and DMCR authorized to issue airworthiness certificates under delegation option provisions of Part 410 of the Regulations of the Administrator.		
Required equipment	In addition to the pertinent required basic equipment specified in CAR 3, the following items of equipment must be installed:	
	Landplane:	items 1 (0-470-L engine) or 2 (0-470-R engine), 102, 103, 201, 202, 204, 406
	Skiplane:	items 1 (0-470-L engine) or 2 (0-470-R engine), 102, 103, 208, 406
	Seaplane:	items 1 (0-470-L engine) or 2 (0-470-R engine), 102, 103, 209, 406

Specifications pertinent to All Models

Datum	Front face of firewall
Leveling means	Upper door sill
Certification basis	Models 180, 180A and 180B: Type Certificate No. 5A6 (CAR 3, Normal Category, effective November 1, 1949, Amendments 3-1 through 3-8 except paragraph 3.265 and 3.668 of Amendment 3-7)
	Models 180C, 180D, 180E and 180F: Type Certificate No. 5A6 (CAR 3, Normal Category, effective November 1, 1949, Amendments 3-1 through 3-12 except paragraph 3.265 of Amendment 3-7; CAR 3, effective May 15, 1956, paragraph 3.668 only, as amended by Amendment 3-3)
Production basis	Production Certificate No. 4

Equipment: A plus (+) or minus (-) sign preceding the weight of an item of equipment indicates net weight change when that item is installed.

Approval for the installation of all items of equipment listed herein has been obtained by the aircraft manufacturer except those items preceded by a double asterisk (**). This symbol denotes that approval has been obtained by someone other than the aircraft manufacturer. An item so marked may not have been manufactured under an FAA monitored or approved quality control system. Conformity must be determined if the item is not identified by a Form FAA-186, PMA or other evidence of FAA production approval.

Items of equipment listed apply to all models unless otherwise specified.

Propellers and Propeller Accessories

1. Hartzell constant speed propeller (Not eligible on the O-470-R engine)
 - (a) Hub HC82XF-1, blades 8833 64 lb. (-40)
 One of the following airplane flight manuals is required for Models 180, 180A and 180B:
 Item 401(a)(1) through (a)(6) or 401(b)(1) through (b)(7) or item 401(u)(1) or (u)(2) or 401(v)(1) or (v)(2)
 Hub HC82XF-6, blades 8833
 One of the following airplane flight manuals is required for Models 180, 180A and 180B:
 Item 401(a)(3) through (a)(6) or 401(b)(3) through (b)(7)
 Diameter:
 (With O-470-A engine) Not over 88 in., not under 86 in.
 (With O-470-K, -L engine) Not over or under 88 in.
 Pitch settings at 30 in. sta.: low 12°, high 24° or 28°
 and (b) Propeller spinner, Hartzell HC82XF-1 or Cessna 0752006 4 lb. (-40)
 and (c) Propeller governor, Woodward 4M12-V, 210065, 210105 or 210340 4 lb. (-34)
 2. McCauley constant speed propeller
 - (a) McCauley hub 2A36C, blades 90M-8 63 lb. (-40)
 One of the following airplane flight manuals is required for Models 180, 180A and 180B:
 Item 401(a)(2) through (a)(6) or 401(b)(2) through (b)(7) or item 401(u)(1) or (u)(2) or 401(v)(1) or (v)(2)
 Diameter: Not over 82 in., not under 80 in.
 Pitch settings at 36 in. sta.: low 10.5°, high 22°
 and (b) Propeller spinner, Cessna 0752004 4 lb. (-40)
 and (c) Propeller governor, Woodward 4M12-V, 210105, 210065, 210345 or 210452 4 lb. (-34)
 or (d) Propeller governor, Garwin 34-828-01 4 lb. (-34)
3. Hartzell constant speed propeller (seaplane installation approved by Cessna EMCR) (Not eligible on the O-470-R engine installation)
 - (a) Hub HC82XF-1, blades 8433 (One of the following airplane flight manuals is required for Models 180, 180A and 180B:
 Item 401(a)(3) through (a)(6) or 401(b)(7) or 401(u)(1) or (u)(2) or 401(v)(1) or (v)(2)
 Hub HC82XF-6, blades 8433 (One of the following airplane flight manuals is required for Models 180, 180A and 180B:
 Item 401(a)(3) through (a)(6) or 401(b)(7)
 Diameter: Not over 84 in., not under 82-1/2 in.
 Pitch settings at 30 in. sta.: low 12°, high 24° or 28°
 and (b) Propeller spinner, Hartzell HC82XF-1 or Cessna 0752006 4 lb. (-40)
 and (c) Propeller governor, Woodward 4M12-V, 210065, 210105 or 210340 4 lb. (-34)

4. McCauley constant speed propeller	63 lb.	(-40)
(a) McCauley hub 2A36C, blades 90M-2		
One of the following airplane flight manuals is required for Models 180, 180A and 180B:		
Item 401(a)(5) or (a)(6) or 401(b)(6) or (b)(7) or 401(u)(1) or (u)(2) or 401(v)(1) or (v)(2)		
Diameter: Not over 88 in., not under 86 in.		
Pitch settings at 36 in. sta.: low 8°, high 22°		
and (b) Propeller spinner, Cessna 0752004	4 lb.	(-40)
and (c) Propeller governor, Woodward 210065, 210105, 210345 or 210452	4 lb.	(-34)
or (d) Propeller governor, Garwin 34-828-01	4 lb.	(-34)
5. Hartzell constant speed propeller (Not eligible on the O-470-R engine)		
(a) Hub HC-A2XF-1 or BHC-A2XF-1, blades 8433 or 8833	64 lb.	(-40)
(BHC-A2XF-1 eligible only on Continental O-470-K, -L engine)		
One of the following airplane flight manuals is required for Models 180, 180A and 180B:		
Item 401(u)(3) or 401(v)(3)		
Diameter: (For 8833 blades) Not over or under 88 in.		
(For 8433 blades) Not over 84 in., not under 82 in.		
Pitch setting at 30 in. sta.: low 12°, high 24°		
and (b) Propeller spinner, Cessna 0752006	4 lb.	(-40)
and (c) Propeller governor, Woodward 4M12-V, 210065, 210105 or 210340	4 lb.	(-34)
6. McCauley constant speed propeller		
(a) McCauley hub 2A34C, blades 90A-8	52 lb.	(-40)
Diameter: Not over 82 in., not under 80 in.		
Pitch setting at 36 in. sta.: low 10.5°, high 22°		
and (b) Propeller spinner, Cessna 0752004	4 lb.	(-40)
and (c) Propeller governor, Woodward 210065, 210105, 210345 or 210452	4 lb.	(-34)
or (d) Propeller governor, Garwin 34-828-01	4 lb.	(-34)
7. McCauley constant speed propeller		
(a) McCauley hub 2A34C, blades 90A-2	52 lb.	(-40)
Diameter: not over 88 in., not under 86 in.		
Pitch setting at 36 in. sta.: low 10.5°, high 22°		
and (b) Propeller spinner, Cessna 0752004	4 lb.	(-40)
and (c) Propeller governor, Woodward 210065, 210105, 210345 or 210452	4 lb.	(-34)
or (d) Propeller governor, Garwin 34-828-01	4 lb.	(-34)
<u>Engine and Engine Accessories - Fuel and Oil Systems</u>		
101. Starter, Delco-Remy 1109668 or 1109471	14 lb.	(-4)
102. Carburetor air filter	1 lb.	(-15)
103. Engine oil cooler, Continental No. C8520912	3 lb.	(-33)
104. Winterization kit, Cessna dwg. 0750105	Neg. wt. increase	
(Item 401(c) required)		
105. Engine oil cooler (Continental 537084) with adapter	7 lb.	(-33)
106. Engine (applies to Model 180 only)		
(a) Continental O-470-J with the following limitations:	No weight change	
Fuel 80 minimum grade aviation gasoline		
Engine limits: For all operations 2550 r.p.m. (225 hp.)		
One of the following airplane flight manuals is required:		
Item 401(a)(4) through (a)(6) or 401(b)(5) through (b)(7)		

106. Engine (applies to Model 180 only) continued		
or (b) Continental O-470-K with the following limitations:	No weight change	
Fuel: 80/87 minimum grade aviation gasoline		
Engine limits: For all operations, 2600 r.p.m. (230 hp.)		
Installation per Cessna dwg. 0750200		
Airplane Flight Manual item 401(a)(6) c 401(b)(7) is required when this engine is installed.		
**107. 18 gal. auxiliary fuel tank installed in accordance with Javelin Aircraft Co., 9175 E. Douglas, Wichita, Kansas, installation instructions dated September 15, 1955, and dwg. 782-1 and 787 for landplanes, and dwg. 782-1, 782-2 and 787 for seaplanes. See NOTE 1 for data on unusable fuel. Item 401(t) required when this tank is installed. This installation not eligible on aircraft equipped with item 402.	24 lb.	(+99)
108. Engine oil cooler, Modine (Continental No. 631095)	5 lb.	(-33)
<u>Landing Gear</u>		
201. Two main wheel-brake assemblies, 6.00-6, Type III		
(a) Goodyear model LF6H3D (6F6HBD also eligible)	13 lb.	(+22)
Wheel assembly No. 511960S		
Brake assembly No. 9530839		
or (b) Goodyear model CL6HBM (castering)	34 lb.	(+22)
Wheel assembly No. 9530375, No. 9530376		
Brake assembly No. 9530368, No. 9530369		
(c) Goodyear wheel and brake assembly	16 lb.	(+22)
Wheel assembly No. 9532111		
Brake assembly No. 9532113		
202. (a) Two main wheel 6 ply-rating tires, 6.00-6 Type III (with regular tubes)	17 lb.	(+22)
or (b) Two main wheel 4 ply-rating tires, 8.00-6 Type III	29 lb.	(+22)
(c) Two main wheel 4 ply-rating tires, 7.00-6 Type III (with regular tubes)	19 lb.	(+22)
or (d) Two main wheel 6 ply-rating tires (tubeless) 6.00-6, Type III, Sidewall inflatable	15 lb.	(+22)
204. Tail wheel 8" Type I pneumatic		
(a) Goodyear wheel No. 510622 with 6 ply-rating tire	3 lb.	(+260)
(b) Goodrich wheel No. B-3-166AP with 6 ply-rating tire	3 lb.	(+260)
208. Skis		
(a) Federal A-3500A. Installed in accordance with Federal dwg. 11R0909	84 lb.	(+16)
or (b) Federal AWB2500A wheel-ski, Federal installation dwg. 11R889. Eligible with hydraulic conversion on ground and in flight	108 lb.	
Note: weight and balance of aircraft shall be checked with ski in retracted and extended positions.	<u>Retracted</u>	<u>Extended</u>
Placard required: "Do not extend or retract skis while in motion on the ground."	(+14.5)	(+18.5)
or** (c) Wesco, Western Aircraft Equipment Co. dwg. 11 and 148		
(1) AS-2750	92 lb.	(+15)
(2) A-30	85 lb.	(+14)
or** (d) Woychik R-1A, Woychik Aircraft Equipment (Middleton, Wisc.) dwg. 1 thru 5 (35 p.s.i. tire pressure required)	58 lb.	(+17)
209. Two floats		
(a) Edo 44-2425 per Cessna dwg. 0742110	315 lb.	(+50)
One of the following airplane flight manuals is required		

209. (a) continued
for Models 180, 180A and 180B:
Item 401(b)(1) through (b)(7) or 401(v)(1) or (v)(2)
or (b) Edo 249-2870 per Cessna dwg. 0742113 378 lb. (+46)
Limits:
C.G. range (+40.2) to (+43.9) at 2820 lb.
(+35.0) to (+43.9) at 2125 lb. or less
Straight line variation between points given
Maximum weight 2820 lb.
Additional required equipment, item 601
One of the following airplane flight manuals is required
for Models 180, 180A and 180B:
Item 401(b)(4) through (b)(7) or 401(v)(1) or (v)(2)
210. Two wheel fairings, Cessna dwg. 0741003 (Cannot be used with 1 lb. (+22)
item 202(b)).
211. Two wheel pants, Cessna dwg. 0441143 (Cannot be used with 6 lb. (+22)
item 202(b)).
213. Federal AT-3500A tail ski 4 lb. (+259)
**214. Whitaker model L-19 tandem gear with item 202(a) installed
in accordance with A. W. Whitaker, P. O. Box 1811, Portland,
Oregon, installation instructions and dwg. CTG-5, dated
October 11, 1952. When this item is installed, performance
information in the airplane flight manual does not apply
**215. Geisse safety gear according to St. Louis Machine Co. dwg. 12 lb. (+20)
1 and 2 and instructions dated May 5, 1953 (revised
October 8, 1953). May be used with item 210 or 211 when
St. Louis Machine Co. conversion kit is installed per
instructions dated February 4, 1954. Not eligible with
items 201(b), 208, 209 or 214 installed.
**216. Two "no drag" wheel fenders per Liquid Tool Co., 8 lb. (+23)
Box 299, Morrow, Ohio, dwg. 105
**217. Amphibian gear, Edo 289-2700, per Cessna dwg. 0742115. Use actual weight
Limitations same as for seaplane except as follows: and balance change
Airspeed limits (TIAS):
Never exceed 164 m.p.h. (red line)
Caution range 130-164 m.p.h. (yellow arc)
Normal operation 64-130 m.p.h. (green arc)
Flap operation 55-100 m.p.h. (white arc)
Maneuvering 129 m.p.h.
Maximum structural cruising 130 m.p.h.
Maximum speed flaps extended 100 m.p.h.
C.G. range (+38.3) to (+43.9) at 2850 lb.
(+36.0) to (+43.9) at 2400 lb. or less
Straight line variation of fwd. limits
between above
2850 lb.
Maximum weight
Airplane flight manual item 401(o) is required
218. Two main landing gear springs Net increase 8 lb. (+20)
(heavy duty) per Cessna dwg. 0741001-5 & 6

Electrical Equipment

301. Battery, Reading R-33 or Cessna 0712604, 12v., 33a. 28 lb. (+114)
302. Generator
(a) Delco-Remy 35A (1101892) 16 lb. (-5)
(b) Delco-Remy 50A (1101895) 16 lb. (-5)
303. Two landing lights, G.E. 4509 4 lb. (+32)
304. Voltage regulator, Delco-Remy 1118704 2 lb. (-1)
305. Rotating beacon (Cessna dwg. 0700031) 2 lb. (+217)

Interior Equipment

401. (a) (1) FAA Approved Flight Manual (Model 180 Landplane)
dated December 23, 1952
(2) Revision A dated September 15, 1953
(3) Revision B dated March 3, 1954
(4) Revision C dated August 26, 1954
(5) Revision D dated January 7, 1955
(6) Revision E dated September 23, 1955
(b) (1) FAA Approved Flight Manual (Model 180 Seaplane)
dated December 23, 1952
(2) Revision A dated September 15, 1953
(3) Revision B dated March 3, 1954
(4) Revision C dated May 14, 1954
(5) Revision D dated August 26, 1954
(6) Revision E dated January 7, 1955
(7) Revision G dated September 23, 1955
(c) FAA Approved Supplement No. 1 dated April 10, 1953, to
Airplane Flight Manual. Pertinent to item 104.
(d) Lear FAA Approved Flight Manual Supplement for Lear
L2B Autopilot, dated February 26, 1953, or November 29, 1954
(e) Deleted
(f) Lear FAA Approved Flight Manual Supplement for Lear L2B
Autopilot with Approach Coupler, dated either December 17,
1953, or November 29, 1954
(g) Deleted
(h) Deleted
(i) FAA Approved Flight Manual Supplement dated March 19, 1954
pertinent to item 407(b)
(j) Deleted
(k) Deleted
(l) Deleted
(m) Deleted
(n) Deleted
(o) Approved Airplane Flight Manual Supplement dated May 16,
1955, or January 16, 1959. (Model 180, 180A and 180B).
Required when item 217 is installed.
(p) Cessna DMCR Approved Airplane Flight Manual Supplement for
ARCON dated February 10, 1955. Required when item 407(d)
is installed.
**(q) Javelin, FAA Approved Airplane Flight Manual Supplement
dated May 20, 1955. Required when item 410 is installed.
(r) Deleted
(s) Deleted
**(t) FAA Approved Airplane Flight Manual Supplement dated
November 17, 1955. (Pertinent to auxiliary fuel tank
installation, item 107)
(u) (1) Cessna DMCR Approved Airplane Flight Manual dated October 19, 1956
(2) Revision A dated August 22, 1958
(3) Revision B dated January 21, 1959
(v) (1) Cessna DMCR Approved Airplane Flight Manual dated October 19, 1956
(2) Revision A dated August 22, 1958
(3) Revision B dated January 21, 1959
(w) FAA Approved Flight Manual dated January 25, 1955.
Required when item 604 is installed.
402. Stewart-Warner 979-B-1 cabin heater installation 20 lb. (+75)
403. Blind flying kit, Cessna dwg. 0700006 5 lb. (+18)
404. Flare installation
(a) Cessna dwg. 0511007 18 lb. (+99)
(b) Cessna dwg. 0511007-1 18 lb. (+117)

405. Stretcher installation, Cessna dwg. 0511003	17 lb. (+95 stowed location)	
406. Stall warning indicator, Cessna dwg. 0511231A	2 lb. (+75)	
407. Automatic pilot		
** (a) (1) Lear L2B installed according to Lear dwg.		
73918 (Model 180 only)	46 lb. (+103)	
Placard required near automatic pilot controller in full view of pilot: "Do not use autopilot below 300' above terrain except during approach when autopilot not to be used below 150' above terrain." (Required only with Airplane Flight Manual Supplements dated prior to November 29, 1954). Servo slip clutch stall torque settings in in.-lb. (plus zero minus five): rudder 50; aileron 25; elevator 20. Servo drum pitch diameters for all three axes are 1.375 in. Item 401(d) required.		
(2) Model 2203C altitude control	2 lb. (+143)	
Model 1350A-1 approach coupler amplifier	8 lb. (+97)	
Model 937A controller	2 lb. (+17)	
Item 401(f) required		
(b) Javelin A-2 or A-3 according to Cessna dwg. 0770002, Rev. A or Javelin dwg. 726, Revision A, and instructions dated June 15, 1954. Item 401(i) required. (Model 180 only)		
** (c) Deleted November 26, 1957. Now covered by Supplemental Type Certificate SA1-106.		
(d) Lear ARCON Model A, Lear dwg. 703437 (Model 180 only)		
Item 401(p) required.	12 lb. (+96)	
408. Centerline camera installation, Cessna dwg. 07100001.	Use actual wt. change	
** 409. Fairbanks Aircraft Service Model FAS-1 seat. Installation to be in accordance with Fairbanks Aircraft Service Instructions.	11 lb. (+70)	
** 410. Javelin Rudder Trim System according to Javelin dwg. 720 and instructions dated June 30, 1955. Item 401(q) required.	4 lb. (+123)	
<u>Miscellaneous (Not listed above)</u>		
601. Rudder return springs, Cessna dwg. 0310196-10 and -11	Neglect wt. change	
602. Stabilizer abrasion boots, Cessna dwg. 0332136-5, installed per Cessna dwg. 0732000	2 lb. (+206)	
603. Woychik retractable aircraft lifting handles, Woychik Aircraft Equipment (Middleton, Wisc.) dwg. 50 and 50A	1 lb. (+172)	
** 604. Ross Control System conversion kit model 9R100. Install in accordance with Ross (F.W. Ross, 719 N. Melborn Ave., Dearborn, Mich.) dwg. 9R100 thru 9B112 on dwg. list dated August 12, 1954, and installation instructions dated August 9, 1954. Placard required on instrument panel: "Equipped with Ross Control System - see Flight Manual Supplement". Item 401(w) required (Model 180 only)	Use actual wt. and balance change	

NOTE 1. Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary, must be in each aircraft at the time of original certification and at all times thereafter (except in the case of operators having an approved weight control system). The certificated empty weight and corresponding C.G. location must include unusable fuel at 30 lb. at (+48) on Models 180, 180E and 180F, and 60 lb. at (+48) on Models 180A, 180B, 180C and 180D. When item 107, 18 gal. auxiliary fuel tank is installed, an additional 3 lb. unusable fuel at (+99) must be included.

NOTE 2. A. The following placards must be displayed in front of and in full view of the pilot:

- (1) On Models 180, 180A and 180B:
 - (a) "This airplane must be operated as a normal category airplane in compliance with the Flight Manual."
 - (b) "No acrobatic maneuvers, including spins, approved."
 - (c) "Both tanks on for takeoff and landing."
 - (d) As seaplane: "Retract water rudder during takeoff and landing."
 - (e) When item 208(b) is installed:
"Do not extend or retract skis while in motion on the ground."
- (2) On Models 180C, 180D, 180E and 180F:
 - (a) This airplane must be operated as a Normal Category airplane in compliance with operating limitations stated in form of placards, markings and manuals. No acrobatic maneuvers, including spins, approved.

Flight Maneuvering Load Factors		
Flaps Up	+3.8	-1.5
Flaps Down	+3.5	

Maximum design weight, 2650 lb.

- (b) "Both tanks on for takeoff and landing."
 - (c) "Flaps - Pull to extend

	Retracted	0°
Takeoff	1st notch	10°
	2nd notch	20°
Landing	3rd notch	30°
	4th notch	40°
 - (d) As seaplane or amphibian: "Retract water rudder during takeoff and landing."
 - (e) In addition to the above placards, the prescribed operating limitations indicated by (*) under Section IV, must be displayed by permanent markings, placards or reports (Weight & Balance Data).
- B. The following placard must be displayed in the baggage compartment on all models: "Maximum baggage 120 lb. For additional loading instructions, see Weight and Balance Data."

... END ...

